Formative Assessment Task

2nd Grade: Operations and Algebraic Thinking

### 2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

**Directions:**

1. Place the following two problems on the board:

4+8 = and 7+5 =

1. Ask students to mentally solve the problems.
2. Ask students to explain why the two sums are equal.

**Considerations:**

Students should use what they know about number relationships to describe how they solved the problem.

For example, 4 + 8 can be solved by decomposing the 4 into 2 + 2 and combining 2 + 8 to make 10 and finding 2 more.

Similarly in 7 + 5, 5 can be expressed as 3 + 2. 3 + 7 = 10 and 2 more is 12.

Other students may need to count on from 8 or 7 by ones. This is a low-level strategy. This is a place for students to start. Students should be encouraged to find more sophisticated strategies as they progress.



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| Teacher notes: |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Not yet:** Student shows evidence of misunderstanding, incorrect concept or procedure | | | **Got It:** Student essentially understands the target concept. | | | | **NEEDS IMPROVEMENT**  **(N)** | | **WITH ASSISTANCE**  **(W)** | | | **INDEPENDENT**  **(I)** | | **0 Unsatisfactory:**  **Little Accomplishment**  The task is attempted and some mathematical effort is made. There may be fragments of accomplishment but little or no success. Further teaching is required. | **1 Marginal:**  **Partial Accomplishment**  Part of the task is accomplished, but there is lack of evidence of understanding or evidence of not understanding. Further teaching is required. | | **2 Proficient:**  **Substantial Accomplishment**  Student could work to full accomplishment with minimal feedback from teacher. Errors are minor. Teacher is confident that understanding is adequate to accomplish the objective with minimal assistance. | **3 Excellent:**  **Full Accomplishment**  Strategy and execution meet the content, process, and qualitative demands of the task or concept. Student can communicate ideas. May have minor errors that do not impact the mathematics. | |   Adapted from Van de Walle, J. (2004) Elementary and Middle School Mathematics: Teaching Developmentally. Boston: Pearson Education, 65 |